

# RIDOT TMC Incident Statistics 1/1/2010 To 3/31/2010

The Rhode Island transportation system serves 39 cities and towns, encompassing rural, metropolitan, and tourist areas. The Rhode Island Department of Transportation's Transportation Management Center (RIDOT TMC) has been addressing the problem of increasing congestion in Rhode Island by informing the traveler of crashes and unusual delays. In doing so, the TMC has provided measurable benefits to the transportation system, and has developed the technology and institutional awareness necessary to expand the Intelligent Transportation Systems (ITS) Program (called RhodeWays) to the benefit of Rhode Island travelers.

The RIDOT TMC maintains detailed statistics on incidents that we manage from our center. Because the data are entered by our TMC Operators, the statistics are dependent on what we can observe on the roadways with our equipment. Review and compilation of these statistics is done quarterly. By making these statistics available to you, we hope that you can learn more about the program and understand the benefit of the services we provide to the Rhode Island motoring public.

The types of incidents tabulated in this report include disabled vehicles, debris on the roadway, emergency roadwork, vehicle accidents, and vehicle rollovers. Additionally, a category exists for congestion delays that are outside of typical recurring congestion. The TMC does assist in information dissemination for planned events (such as construction) as well, but those types of events are not included in the statistics. Also, abandoned vehicles are not included since they tend to skew the statistics.

We hope you find this report interesting and that it helps in understanding the significant benefit that the RhodeWays program provides to the people who travel Rhode Island's roadways every day. Also, please remember to check the TMC website frequently for updates (http://www.tmc.state.ri.us), including construction and incident information.

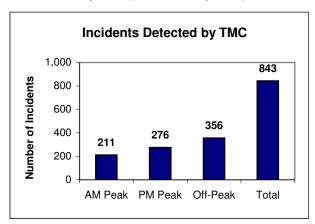
# **RIDOT TMC Incident Statistics Report**

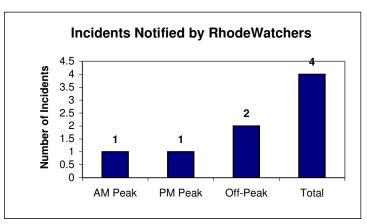
#### 1. Peak Period Incident Statistics\*

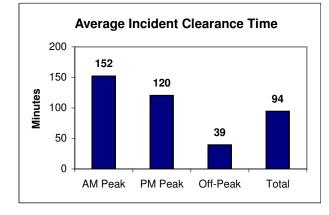
	AM Peak	PM Peak	Off-Peak	Total
Number of Incidents	229	297	382	908
Avg. Incident Duration (hr:min)	153	121	40	95
Avg. Incident Clearance Time (hr:min)	152	120	39	94
Avg. Incident Recovery Time (hr:min)	1	0	0	0
# Detected by TMC Operators (CCVE)	81	146	116	343
# Detected by TMC, State Police	130	130	240	500
# Notified by RhodeWatchers	1	1	2	4
# of Messages Posted VMS	14	34	36	84
# of Messages Posted DMS	49	90	136	275
# of Messages Posted HAR	51	81	81	213
# of Messages posted Web	198	286	351	835
Avg. Delay Cost**	\$645,989	\$509,978	\$167,915	\$400,373
Total Delay Cost	\$147,931,540	\$151,463,585	\$64,143,687	\$363,538,811

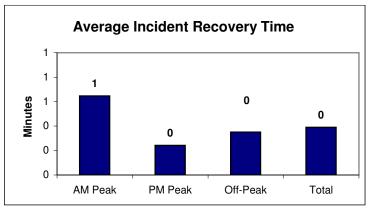
<sup>\*</sup> AM Peak: 6:00AM to 10:00 AM, PM Peak: 3:00PM to 7:00PM, Monday - Friday

<sup>\*\*</sup> Delay Cost is a function of incident duration, volume on the roadway, delay per person, and cost per hour of delay for both commercial and personal vehicles. Average delay cost includes only incidents with a lane blockage and represents average cost per incident.









Note: Statistics in this report are only for incidents that the TMC reported or responded to. They do not include all incidents that occurred on Rhode Island roadways

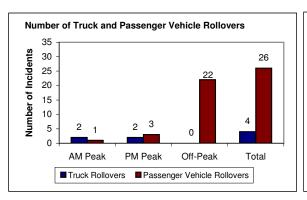
**Incident Clearance Time** is the time from the start of an incident (or when it is detected) to the time it is cleared from the roadway.

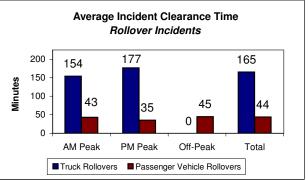
**Incident Recovery Time** is the time it takes for the roadway to be rid of residual delay following incident clearance. It is based on TMC Operator observation.

#### 2. Rollover Incident Statistics\*

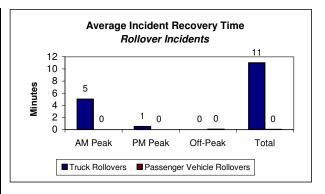
	Trucks			Automobiles				
			Off-		AM	PM	Off-	
VEHICLES	AM Peak	PM Peak	Peak	Total	Peak	Peak	Peak	Total
No. of Rollovers	2	2	0	4	1	3	22	26
Avg. Incident Duration								
(min)	159	177	0	168	43	35	45	44
Avg. Incident Clearance								
Time (min)	154	177	0	165	43	35	45	44
Avg. Incident Recovery								
Time (min)	5	1	0	11	0	0	0	0

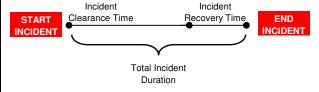
<sup>\*</sup> AM Peak: 6:00AM to 10:00 AM, PM Peak: 3:00PM to 7:00PM, Monday - Friday





Roadway	Exit Number	Number Of Rollovers
	N/A	Hollovers
Airport Connector Westboul		l
Interstate 195 Eastbound	3	1
Interstate 195 Westbound	3	1
Interstate 195 Westbound	N/A	1
Interstate 295 Northbound	8A	1
Interstate 295 Southbound	9B	1
Interstate 295 Southbound	7A	1
Interstate 95 Northbound	2	1
Interstate 95 Northbound	7	1
Interstate 95 Northbound	24	1
Interstate 95 Northbound	22A	1
Interstate 95 Northbound	15	1
Interstate 95 Northbound	18	1
Interstate 95 Northbound	18	1
Interstate 95 Northbound	8A	1
Interstate 95 Southbound	N/A	1
Interstate 95 Southbound	22B	1
Interstate 95 Southbound	6A	1
Interstate 95 Southbound	25	1
Interstate 95 Southbound	5A	1
Interstate 95 Southbound	5B	1
Interstate 95 Southbound	12A	1
Interstate 95 Southbound	2	1
Route 10 Southbound	N/A	1
Route 146 Northbound	N/A	1
Route 4 Northbound	6	1
Route 4 Southbound	8	1
Route 403 Northbound	N/A	1
Route 6 Eastbound	N/A	1
Route 7 Southbound	N/A	1
	,	-
	TOTAL	30





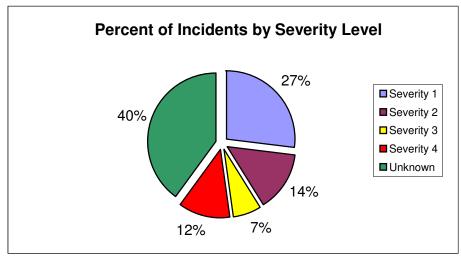
#### 3. Incidents by Severity Level

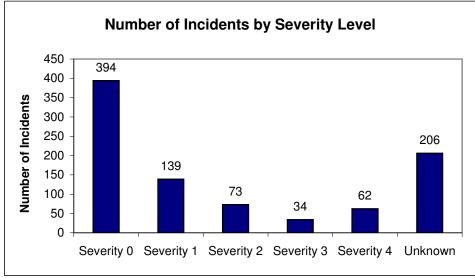
Severity Level*	No. of Incidents
Severity 0	394
Severity 1	139
Severity 2	73
Severity 3	34
Severity 4	62
Unknown	206
Total	908

<b>Number of Incident</b>	s with a Secondary
Incident:	5

Percentage of Incidents with a Secondary Incident: 0.55%

Note: A "secondary" incident is one that is the result of an earlier incident.





### \*Definition of Incident Severity Levels:

Severity 0: No injuries and no travel lanes blocked

Severity 1: 1/4+ travel lanes blocked with no injuries OR median/shoulder closed with injuries

Severity 2: 1/3 or 2/4+ lanes blocked OR Fire w/ 0 lanes closed OR hazardous materials (HAZMAT) w/ 0 lanes closed

Severity 3: 1/2 or 2/3 or 3/4+ lanes blocked OR Fire w/ 1/3 or 2/4 lanes closed OR

Hazmat w/ 2/4 lanes closed

Severity 4: All travel lanes blocked OR fatality OR Hazmat w/ clean-up OR Fire w/ 1/2, 2/3, 3/4 lanes closed OR Structural damage w/ 1/3, 2/3+ lanes closed

Unknown: Incidents without a recorded severity level

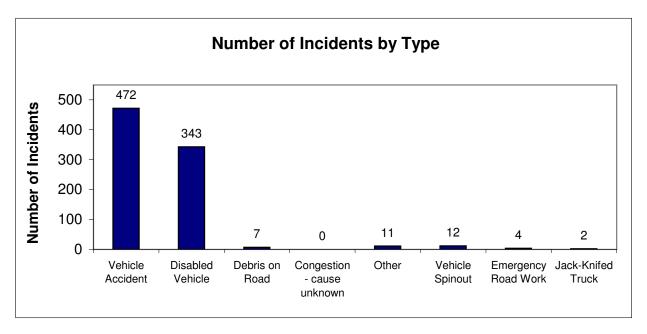
Note: For travel lanes blocked terminology, "1/4" indicates 1 out of 4 lanes blocked

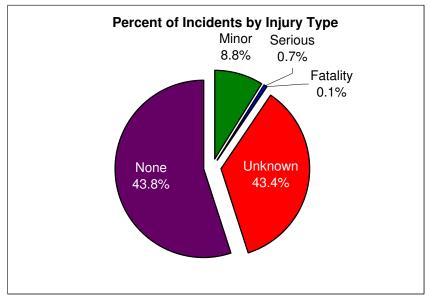
# 4. Incidents by Type

Incident Type	No. of Incidents
Vehicle Accident	472
Disabled Vehicle	343
Debris on Road	7
Congestion - cause unknown	0
Other	11
Vehicle Spinout	12
Emergency Road Work	4
Jack-Knifed Truck	2
Total Number of Incidents	851

# 5. Incidents by Injury Type

Injury Type	No. of Incidents
Minor	80
Serious	6
Fatality	1
Unknown	321
None	500
Total	908





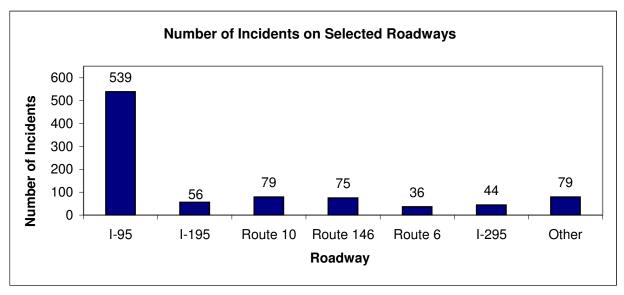
# 6. Incidents by Pavement and Weather Conditions

Pavement Condition	No. of Incidents
Dry	602
Wet	270
lcy	16
Snow-Covered	15
Flooded	5
Other	0
Total	908
Precipitation	
None	666
Light-moderate rain falling	147
Heavy rain falling	49
Light-moderate sleet falling	1
Heavy sleet falling	0
Light-moderate snow falling	45
Heavy snow falling	0
Total	908
Wind	
Calm to Moderate	838
Moderate to Strong	67
Gusts over 50 mph	1
Gusts over 75 mph	0
Hurricane	0
Other	0
N/A	2
Total	908
Visibility	
Clear	697
Light fog	28
Dense fog	7
Reduced- rain	131
Reduced-snow	34
Poor-heavy rain/sleet	9
Poor-heavy snow	0
Reduced-smoke	0
Other	2
N/A	0
Total	908

# 7. Incidents Detected by Primary Notifier on Selected Roadways

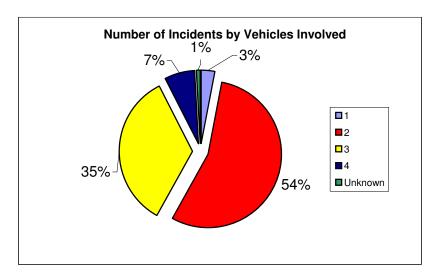
Roadway	Primary Notifier	No. of Incidents
I-195	TMC Operator	26
	State Police Scanner	20
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	10
	Total	56
I-95	TMC Operator	229
	State Police Scanner	214
	Local Fire Department	0
	Rhode Watcher	3
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	93
	Total	539
I-295	TMC Operator	4
	State Police Scanner	27
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	1
	Other	12
	Total	44

Roadway	Primary Notifier	No. of Incidents
Route 10	TMC Operator	35
	State Police Scanner	31
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	13
	Total	<i>7</i> 9
Route 146	TMC Operator	28
	State Police Scanner	31
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	16
	Total	<i>75</i>
Route 6	TMC Operator	13
	State Police Scanner	10
	Local Fire Department	2
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	11
	Total	36



# 8. Incidents by Number of Vehicles Involved

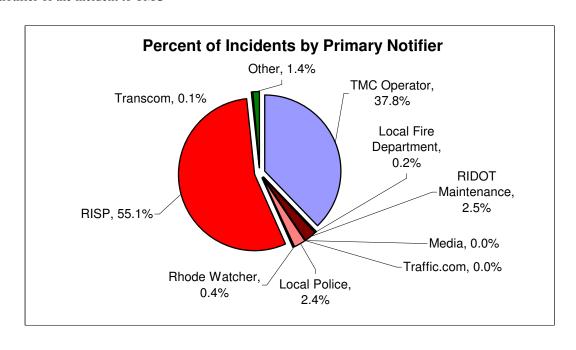
No. of Vehicles	No. of
Involved	Incidents
1	28
2	484
3	306
4	58
5	19
6	2
7	2
8	0
9	0
10+	2
Unknown	7
Total Incidents	908

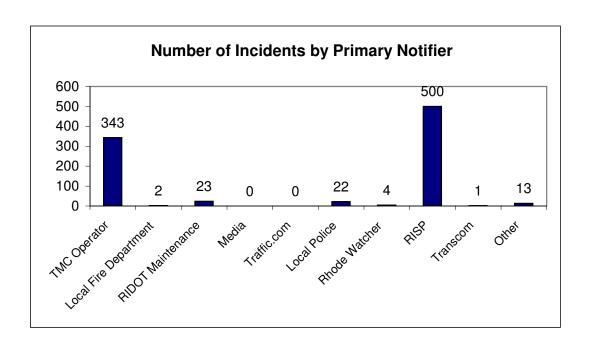


#### 9. Incident Notification

Primary Notifier*	No. of Incidents
TMC Operator	343
Local Fire Department	2
RIDOT Maintenance	23
Media	0
Traffic.com	0
Local Police	22
Rhode Watcher	4
RISP	500
Transcom	1
Other	13
Total	908

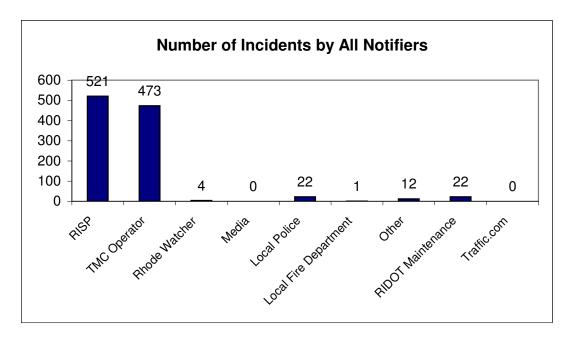
<sup>\*</sup>First notifier of the incident to TMC





Notifier	No. of Incidents
RISP	521
TMC Operator	473
Rhode Watcher	4
Media	0
Local Police	22
Local Fire Department	1
Other	12
RIDOT Maintenance	22
Traffic.com	0
Transcom	1

Note: Primary notifier indicates the first notifier of the incident to the TMC.
Additional notifiers are also logged, and are represented in the statistics for "all notifiers".



# 10. Incident Response

		Percent of Total
On-Scene Responding Agency	No. of Incidents	Incidents
State Police	744	81.94%
Tow	315	34.69%
Local Fire Department	162	17.84%
EMS	173	19.05%
Local Police	58	6.39%
Service Patrol	26	2.86%
Mass Highway	2	0.22%
DOT	18	1.98%
Hazmat	1	0.11%
DEM	3	0.33%
Connecticut DOT	0	0.00%
Construction	1	0.11%
Coast Guard	0	0.00%
Department of Health	0	0.00%
K-9	0	0.00%
RIPTA	0	0.00%

	# of Incidents
# Involved Equipment(HAR,VMS or CCVE)	354
# of VMS Messages	84
# of DMS Messages	275
# of HAR Messages	213
# of Web Messages	798

Note: Numbers and percentages in upper table indicate how many of the incidents during the month were responded to by the agency indicated. Note that multiple agencies may respond to an incident, so percentages do not add up to 100%.

